UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

Ref: 8EPR-SR May 20, 2013

MEMORANDUM

SUBJECT: Libby Asbestos Superfund Site
Feasibility Study Milestone Meeting

FROM: Rebecca Thomas, Team Lead RPM
Dania Zinner, RPM

TO: The File

The following items outline the discussions and outcomes of the Libby Feasibility Study (FS) Milestone Meeting, which included participants from the Environmental Protection Agency (EPA) project team, enforcement, management, headquarters and also project team members and management from Montana Department of Environmental Quality (MDEQ) (Attachment 1). An agenda is also included in the memorandum (Attachment 2) plus an operable unit (OU) boundary figure (Attachment 3), list of alternatives (Attachment 4), and a schedule (Attachment 5).

- Ecological risk and post-construction ABS for OU1 and OU2 will not be included in cumulative risk assessment and FS. Instead, any outstanding issues on these OUs will be evaluated in the Five Year Review (scheduled to be completed in 2015 for OUs 1 and 2).

- The FS would then only include OUs 4-8. OU3 is on a separate enforcement track and thus will have its own FS and record of decision (ROD).

- EPA will continue to work closely with the state on nature and extent of contamination including OU3, OU4, and OU7 boundary determinations.

- For the list of alternatives (Attachment 3), a suggestion was made to have some of the alternatives clarified as two separate actions, one No Action and the other No Further Action if needed. Since OUs 1 and 2 will not be included in the FS, it was decided that the No Further Action alternative was not needed.

Attachment 1:

List of Invitees

Stites, Rob	Did not attend
Wharton, Steve	Attended
Costanzi, Frances	Did not attend
Sisk, Richard	Attended
Vranka, Joe	Attended
Sparks, Sara	Did not attend
Thomas, Rebecca	Attended
Christensen, Stanley	Attended
Murray, Bill	Did not attend
Zinner, Dania	Attended
Fagen, Elizabeth	Did not attend
Abendschan, Sharon	Attended
Ross, Lorraine	Attended
Madigan, Andrea	Attended
Berry, David	Attended
McKean, Deborah	Attended
Wall, Dan	Attended
Edson, Karen	Did not attend
Faulk, Libby	Did not attend
Rutland, Carolyn	Attended
John Podolinsky	Attended
Cirian, Mike	Attended
Progess, Christina	Did not attend
Scusa, Larry	Attended
Leclerc, Russell	Did not attend
Lausch, Robert	Attended
Morgan, Jon	Attended

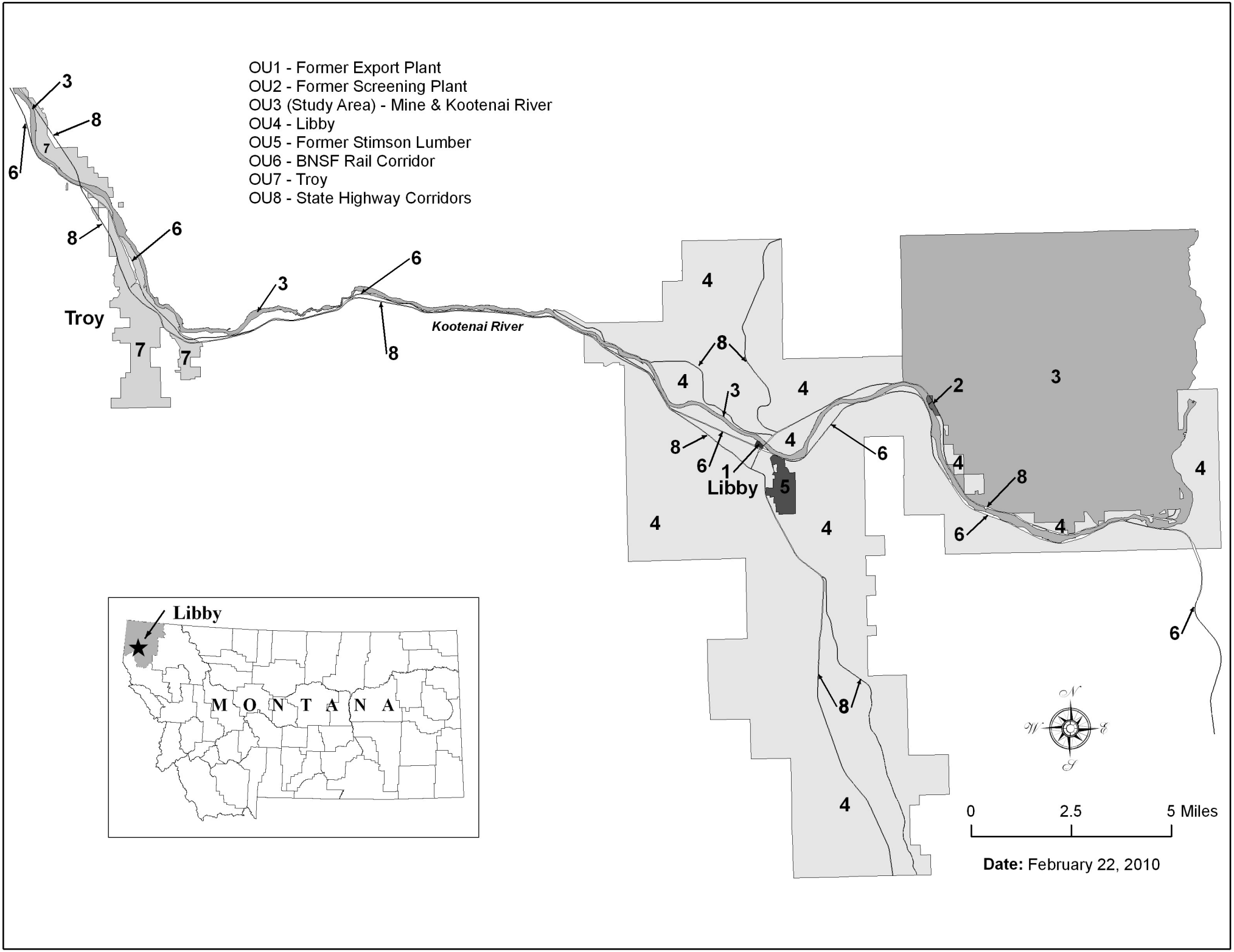
Attachment 2:

Libby Asbestos Superfund Site
Libby, Montana

Feasibility Study Milestone Meeting
April 17, 2013

Agenda

1) Background and Overview
    a. Site Boundary
    b. Operable Units and Status
    c. Budget
    d. PRP Status
2) Conceptual Site Model
    a. Contaminants of Concern
        i. Soil
        ii. Building Material
        iii. Bark/Duff/Wood
    b. Nature & Extent
    c. Background
3) Risk and Reuse
    a. Current and Reasonably anticipated land use
    b. Human Health Risk Assessment
    c. Ecological Risk Assessment
4) Groundwater
5) ARARs
    a. RODs for OU1 and OU2
    b. Removal Action for OU3
6) Feasibility Study
    a. Remedial Action Objectives
    b. Anticipated Alternatives
    c. Remediation Goals and Points of Compliance
    d. Institutional Controls
7) Other Issues
    a. BNSF Path Forward
    b. Define Remedial Action completion
8) Summary of Meeting and Next Steps


OU1 - Former Export Plant
OU2 - Former Screening Plant
OU3 (Study Area) - Mine & Kootenai River
OU4 - Libby
OU5 - Former Stimson Lumber
OU6 - BNSF Rail Corridor
OU7 - Troy
OU8 - State Highway Corridors
Troy
Kootenai River
Libby
MONTANA
Libby
0
2.5
5 Miles
Date: February 22, 2010

Preliminary List of Remedial Alternatives by Contaminated Medium

Tables 1 through 3 present a preliminary list of remedial alternatives to address each contaminated medium potentially evaluated within the Libby Asbestos Superfund Site FS for Operable Units 1, 2, 4, 5, 6, 7, and 8. Currently it is assumed that contaminated media requiring remediation will include soil, building materials, and vegetative bark/duff.

These tables are for FS planning and scoping purposes only. The anticipated preliminary screening results are based on previous FS project experience at the Libby Asbestos Superfund Site and other asbestos-contaminated Superfund Sites and are subject to change during further FS development once the remedial technology/process option screening process is initiated and completed. It should be noted that the no further action alternatives may ultimately be selected for one or more media and operable units. For instance, even though OU1 and OU2 are included in the FS it is unlikely additional actions for contaminated soil would be taken.

Certain response activities such as temporary relocation, continuation of the ERS program, and ongoing removal actions will be included in all active remedial alternatives as a fundamental assumption and thus are not separately mentioned to lessen confusion about future remedial activities discussed in the FS.

Table 1 Preliminary List of Remedial Alternatives for Contaminated Soil

Preliminary Alternative ID and Titles		Anticipated Preliminary Screening Result
SO1	No Action / No Further Action	Retained
SO2	Administrative Controls with Monitoring	Screened Out
SO3	Permanent Relocation and Administrative Controls with Monitoring	Screened Out
SO4	Capping of Contaminated Soil and Administrative Controls with Monitoring	Retained
SO5	Partial Excavation of Contaminated Soil, Disposal of Excavated Soil at the Former Libby Vermiculite Mine, Capping of Remaining Contaminated Soil, and Administrative Controls with Monitoring	Retained
SO6	Excavation of Contaminated Soil and Disposal of Excavated Soil at the Former Libby Vermiculite Mine	Retained
SO7	Excavation and Thermal/Chemical Treatment of Excavated Soil	Screened Out

Notes:
Shading indicates that the remedial alternative is anticipated to be eliminated during alternative screening.
Contaminated soil includes mine wastes and vermiculite comingled with soils.
Administrative controls include access controls (fencing/signage), community awareness activities (including the ERS), and institutional controls (legal controls).
The type of thermal/chemical treatment to be evaluated will be determined once the remedial technology/process option screening process is initiated and completed.

Table 2 Preliminary List of Remedial Alternatives for Contaminated Building Materials

Preliminary Alternative ID and Titles		Anticipated Alternative Screening Result
BM1	No Action / No Further Action	Retained
BM2	Interior Cleaning and Administrative Controls with Monitoring	Screened Out
BM3	Permanent Relocation with and Administrative Controls with Monitoring	Screened Out
BM4	Encapsulation of Contaminated Building Materials, Interior Cleaning, and Administrative Controls with Monitoring	Screened Out
BM5	Partial Removal of Contaminated Building Materials, Disposal of Removed Materials at an Existing Permitted Facility, Encapsulation of Remaining Contaminated Building Materials, Interior Cleaning, and Administrative Controls with Monitoring	Retained
BM6	Removal of Contaminated Building Materials, Disposal of Removed Materials at an Existing Permitted Facility, and Interior Cleaning	Retained
BM7	Removal of Contaminated Materials, Thermal/Chemical Treatment of Removed Materials, and Interior Cleaning	Screened Out

Notes:
Shading indicates that the remedial alternative is anticipated to be eliminated during alternative screening.
Contaminated building materials assumed to exist within structures in OU4 and OU7, at a minimum.
Administrative controls include access controls (fencing/signage), community awareness activities (including the ERS), and institutional controls (legal controls).
The type of thermal/chemical treatment to be evaluated will be determined once the remedial technology/process option screening process is initiated and completed.

Table 3 Preliminary List of Remedial Alternatives for Contaminated Vegetative Bark/Duff

Preliminary Alternative ID and Titles		Anticipated Alternative Screening Result
BD1	No Action / No Further Action	Retained
BD2	Administrative Controls with Monitoring	Retained
BD3	Capping of Contaminated Duff and Processed Bark/Brush, and Administrative Controls with Monitoring	Screened Out
BD4	Removal of Contaminated Live Vegetation, Disposal of Removed Vegetation at the at the Former Libby Vermiculite Mine, Capping of Remaining Contaminated Duff and Processed Bark/Brush, and Administrative Controls with Monitoring	Retained
BD5	Removal of Contaminated Live Vegetation, Duff, and Processed Bark/Brush; and Disposal at the Former Libby Vermiculite Mine	Retained
BD6	Removal of Contaminated Live Vegetation, Duff, and Processed Bark; and Thermal/Chemical Treatment of Contaminated Vegetation	Screened Out

Notes:
Shading indicates that the remedial alternative is anticipated to be eliminated during alternative screening.
Contaminated vegetative bark/duff assumed to exist in live trees and brush and processed bark and mulch within OU4, OU5, and OU7, at a minimum.
Administrative controls include access controls (fencing/signage), community awareness activities (including the ERS), and institutional controls (legal controls).
The type of thermal/chemical treatment to be evaluated will be determined once the remedial technology/process option screening process is initiated and completed.

SIGNIFICANT MILESTONE SCHEDULE FOR RI AND FS
LIBBY ASBESTOS SUPERFUND SITE

Significant Milestones	Milestone Date
Remedial Investigation (RI) Report Completion for Libby Sitewide FS Development	
OU1 RI Report (Completed)	8/3/2009
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	8/3/2009
OU2 RI Report (Completed)	8/24/2009
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	8/24/2009
OU4 RI Report	10/1/2013
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	6/10/2013
OU5 Revised RI Report	7/1/2013
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	6/10/2013
OU6 RI Report	12/2/2013
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	6/10/2013
OU7 RI Addendum Report	12/2/2013
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	6/10/2013
OU8 Revised RI Report	6/10/2013
Critical Path Information (OU Background, Investigation/Cleanup History, Extent of Contamination)	6/10/2013
Site Wide Human Health Risk Assessment	7/1/2014
Critical Path Information (CSM, PRAOs)	7/1/2013
Receive Final Toxicity Values for LA Asbestos	6/2/2014
Site Wide Ecological Risk Assessment	8/30/2013
Critical Path Information (CSM, PRAOs)	7/1/2013
LA Asbestos Background Study	7/1/2014
Critical Path Information (Determination of Initial Background Concentrations)	2/28/2014
Feasibility Study (FS) for Operable Units (OUs) 1, 2, 4, 5, 6, 7, and 8	
FS Task Order Initiation	5/7/2013
Site Conditions, History, and Contamination Extent	12/16/2013
ARAR/TBC Development	7/3/2013
Risk Evaluations/Determinations	9/16/2013
PRAO Determination	7/30/2013
Identify (Refine) and Screen GRAs, Remedial Technologies, and Process Options	8/29/2013
Assemble Sitewide Remedial Alternatives for Screening	9/10/2013
Remedial Alternatives Screening (Excluding Cost)	10/31/2013
Remedial Alternatives Screening Cost Estimate Development	10/29/2013
Contaminated Media Modeling for Alternatives Evaluation	11/26/2013
Detailed Analysis of Remedial Alternatives (Excluding Cost)	2/13/2014
Detailed Alternatives Evaluation Cost Estimate Development	2/4/2014
Comparative Analysis of Retained Alternatives	2/25/2014
Draft Final FS Report	4/9/2014
Final FS Report	7/8/2014